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a spur gear stage driven by said sun gear via said sun gear shaft, said spur gear stage being arranged to drive at least one generator.

REMARKS

Claim 1 has been amended to incorporate a limitation previously found in claim 15. More particularly, claim 1 has been amended to recite the outer and inner bearings which support the rotor. An embodiment of these bearings is indicated at 9, 15 in Figure 1.

Claims 1-2, 4, 7, 10 and 14-18 stand rejected as anticipated by Takahashi JP 07229471A. To the extent this rejection would be applied to claim 1 as presently amended, it is traversed for the reasons following.

Takahashi in Figure 1 discloses a rotor 4 supported by a single bearing, the remaining support being provided by the ring gear 10 and planet wheels 11. Takahashi in Figure 4 discloses a pair of bearings supporting a cylindrical section of the rotor shaft, the bearings having the same diameter. There is no suggestion that the rotor shaft, as well as the bearing supporting it, have a larger diameter toward the rotor head (shown in Figure 3).

The arrangement recited in applicants' claim 1 as presently amended permits using a larger bearing close to the rotor head, where the stresses are higher, while still permitting economic use of space inside the housing. That is, the arrangement recited in claim 1 permits the planetary gears to be accommodated in the housing between the bearings, as recited in claim 16. The relatively small bearings disclosed by Takahashi are more highly stressed and subject to failure. Further, Takahashi requires a relatively large housing (Figure 3) which increases the weight which must be supported by tower 8.

For the foregoing reasons it is felt that claim 1 as presently amended defines patentably over the art of record.

New submitted independent claim 19 recites the gear arrangement with specificity. That is, there are two planetary gears (indicated as 2, 5 in the figure) on each shaft supported by the housing. One of the gears meshes with an annular gear carried by the rotor, the further gear meshing with a sun gear. This arrangement is not suggested by Takahashi, and provides an additional step-down in the gearing without using the complex arrangement shown in Figures 4 and 5 of Takahashi.


Withdrawal of the rejections and early allowance are solicited. If any objections remain, a call to the undersigned is requested.

A check for filing the RCE application is enclosed

Any additional fees or charges required at this time may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,

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AMENDMENTS TO THE CLAIMS SHOWING CHANGES

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THE CLAIMS:

Claims 1, 15, and 16 are amended as follows:

1. (Twice Amended) A transmission for a wind generator, the transmission comprising

a housing,

a rotor supported by said housing and rotatably mounted in said housing, said rotor carrying a rotor head, said rotor being supported in said housing by an outer bearing toward said rotor head and an inner bearing away from said rotor head, said rotor having a larger diameter at said outer bearing than at said inner bearing,

a multi-stage planetary transmission stage driven by said rotor, said stage comprising gears which are rotatably mounted in said housing, and

a spur gear stage driven by said multi-stage planetary transmission stage, said spur gear stage being arranged to drive at least one generator.

15. (Amended) A transmission as in claim 1 wherein said rotor carries a rotor head, said rotor having a conical shape with a diameter which increases toward said rotor head[, said rotor being supported in said housing by an outer bearing toward said rotor head and an inner bearing away from said rotor head].

16. (Amended) A transmission as in claim [15] 1 wherein said multi-stage planetary transmission stage comprises at least one [planeary] planetary gear on a respective at least [on] one shaft which is supported by said housing and rotatably mounted at a fixed position in said housing,

said planetary gear being located adjacent to said rotor between said outer bearing and said inner bearing.